#### Personal Assessment:

## Presents a cohesive written analysis that describes the role(s)

- 1) They played over the course of the project and their contribution to the project in that role.
  - a. We chose roles early in the project. I primarily focused on the datasource and database integration into PostGresSQL, ETL, ERD and file creation.
  - b. I helped to organize deliverables and project notes
  - c. I created the slide structure and contributed to the written slides and verbal presentation equally
- 2) Presents a cohesive written summary of how they contributed to each of the roles they did not take on via team discussions, peer reviews, or other means.
  - a. While I was present in all feedback, weekly meetings, and while machine learning and data visualization components were being built I did not actively engage in their completion.
    They were assigned to others and the team members were able to accomplish each respective deliverable with autonomy.
- 3) Additionally, the analysis should describe their greatest personal challenge over the course of the project, and how they overcame that challenge.
  - a. A TA encouraged me to utilize Python code to create Sqllite tables, this was a challenge. The tables were created, they took some time, and they could be used for a future enhancement.

#### **Team Assessment**

### Presents a cohesive written analysis that describes their teamwork, including all of the following:

- Their communication protocol, including any challenges, how they were resolved, and what they would do differently next time
  - a. We established conflict and communication rules in meeting 1 and wrote down in notes (on Github) how we would handle.
    - If there was a disagreement with a certain deliverable that was assigned, the owner assigned to each deliverable: database, machine learning, or data visualizations had final say.
    - ii. If there was an interpersonal conflict the two would sidebar and take offline to resolve.
    - iii. We did not encounter challenges, we had a very cohesive and supportive team.
- 2) Their strengths as a team, including tips and tricks they would want to share with a new cohort kicking off the project
  - a. Assign the project as deliverables and try to enable the teammates to choose what they would be strongest at, or most enjoy. (ex. While I enjoy machine learning I am not quite adept at going quickly and did not want to hold the team back. I felt confident in delivering the visualizations or the database/SQL support. I felt I could knock out the SQL fast -to allow the downstream the time to use what was created.
  - b. Allow the person assigned to have autonomy of the deliverable and help as asked.
  - c. Meet together during the entire project. You may be tired from attending class, but attending time together during the project keeps everyone accountable and allows time to show progress.

# **Project Summary**

Utilizing a logistic model and Kaggle datasets we forecasted with 74% balanced accuracy the winner of college football games from 2008-2013 based only on first-half stats and within a spread of no more than 14 points at the half. Features for the function included score, pass and rush yards, penalty yards, incomplete pass and whether the respective team was home or away. The model is scalable and can be used to learn and grow from future games, as well as be considered as an application for mid-game bets.